

DISMANTLING/DEMOLITION PLAN

1.01– Description

This plan describes the procedures to be employed by MARCOR during the dismantling and controlled demolition of all structures at the former W. R. Grace and Company, Screening Plant (Operable Unit 02, OU2) in Libby, Montana. The structures to be dismantled and demolished are shown on Drawing C2, the Demolition Plan.

1.02– Materials

The approved erosion control plan shall be in place prior to initiating the dismantling/demolition plan.

1.03– Personnel

Equipment operators
Technicians
Truck Drivers

1.04– Equipment

Excavator with progressive linkage thumbs
Excavator with hydraulic shears
Excavator with concrete pulverizer
Backhoe
Wheel Loaders
Water Trucks
Pressure Washers
Platform Lifts
Boom Lifts
End Dump Trucks
Articulating Dump Trucks

1.05– Procedures for Dismantling/Demolition

The work described below shall begin following the completion of the inventory and appraisal of the personal property located at OU2. The Contractor shall perform the personal property appraisal, located at OU2. Upon notification given by the Government, the Contractor shall commence with the procedures described below.

5.1 - Dismantling/Demolition Initial Inspection

The Project Superintendent and a representative from the Government shall inspect the structure to determine the following:

- a. Federal, State and local authorities have been notified in writing of the nature and schedule of the work
- b. State of Montana, U-Dig have been contacted 48 hours in advance of work and assigned a site specific number (800)551-8344
- c. Utilities have been properly disconnected or isolated from the structure
- d. Building contents have been removed from the structure
- e. Hazardous materials have been removed from the structure
- f. Adequate water supply is available for dust control
- g. The structure and work area have been thoroughly soaked with water prior to start of work to mitigate the potential dust hazard

- h. The Government has granted permission to proceed with dismantling and controlled demolition of the structure
- i. The crew has been briefed as to the steps required to conduct a safe demolition of the structure
- j. The water trucks are properly staged to provide adequate water spray throughout the structure during dismantling/demolition
- k. Dust control measures using the boom lifts are in place to provide water spray over the top of the structure
- l. The area surrounding the structure has been secured and no authorized persons or equipment shall be allowed inside during the demolition process
- m. Erosion control devices (SEE Erosion Control Plan) are properly secured at the down gradient side of the structure to prevent the dust control water from migrating off site during the dismantling/demolition process
- n. Equipment and personnel are staged at a horizontal distance equal to 1.5 times the vertical height of the structure with the exception of the excavators
- o. The structure has been thoroughly washed with water to assist in dust control during structural dismantling and demolition
- p. The underground tunnels have been thoroughly decontaminated by pressure washing and all materials from the mushroom operation have been removed and properly stored for transportation and disposal at the Abandoned Vermiculite Mine (Mine)

5.2 - Dismantling/Demolition Process

The dismantling/demolition process may begin upon completion of the Initial Inspection by the Project Superintendent and approval from the Government. Proper documentation of the Initial Inspection shall be provided in the project files.

Structural dismantling and controlled demolition of the each structure shall be done using the excavators with thumb and shear attachments, bulldozers, and wheel loaders under constant water spray. Dust control using water spray shall be done with a 1 1/2" fire hose attached to the water line from Rainy Creek Road. Additional Dust Control shall be done using 2,000-gallon water trucks staged near the excavators. Water shall be sprayed from personnel in the boom lifts spraying down onto the structures and from ground surface near the excavators. The dismantling and controlled demolition process shall be halted in the event visible dust is generated. The dust control measures shall continue until the dust disperses or has settled under the constant water spray. The demolition process may begin again when the dust has dissipated.

The excavator with shears shall cut cross members and beams while the excavator with thumb assists with pulling the structure down. This process shall continue until the entire structure has been brought to the ground.

The excavator with shears shall begin processing the debris and sizing for loading, transportation and disposal at the Abandoned Vermiculite Mine (Mine). Steel and wood components of each structure shall be cut to a maximum of 4' x 4' pieces to ease placement into end dump trucks for transportation to the Mine. The processed demolition debris shall be stock piled on each structure's footprint until loading begins allowing free standing water in the demolition debris to percolate through the debris pile and be captured on the concrete slabs and within the erosion control measures adjacent to each structure.

Loading end dump trucks with the demolition debris shall be done using the excavators with thumb attachment and wheel loaders. All work shall be done under constant air monitoring and water spray.

While the excavator with shear attachment is processing the demolition debris, the excavators with thumbs shall be demolishing the remaining structures. The wheel loaders and bulldozers shall be used to demolish and process structures other than the West Shed and Long Shed.

Demolition of the concrete tunnels shall occur following demolition of the Long Shed. A 3:1 slope shall be excavated to access the concrete tunnel underneath the north and west edge of the Long Shed. Excavation spoils shall be staged onto the asphalt slab in preparation of transportation and disposal at the Abandoned Vermiculite Mine (Mine). The excavator with pulverizer shall gain access to the top of the concrete tunnel

where it shall be staged. The excavator shall extend the pulverizer to the exposed end of the tunnel while staged on top of the tunnel. The pulverizer will be engaged and crush the concrete tunnel and move back along the length of the tunnel until complete. Crushed concrete shall be allowed to remain inside the tunnel and backfilled upon completion.

Strict adherence to the approved Site Health and Safety Plan shall be employed at all times during the dismantling and demolition phase of the work.

5.3 – Dismantling/Demolition Sequence

The sequence of the dismantling/demolition work is as follows:

- a. Parker residence
- b. Greenhouses
- c. West Shed
- d. Long Shed
- e. Concrete Tunnels
- f. Concrete slabs
- g. Asphalt paving

The concrete tunnels, concrete slabs, and asphalt paving shall be demolished in conjunction with the Excavation Phase of work. Approximately 4,500 cubic yards of overburden must be removed to expose the tops of the concrete tunnels adjacent to the Long Shed and West Shed. In an effort to expose the tunnel underneath these structures, a 3:1 sloped excavation shall be required. The resulting excavation will encroach upon the access route east of the Long Shed, and the footprint of the West Shed and the greenhouse located due north. This substantial activity should be done in conjunction with the excavation activities scheduled for Phase III (Greenhouse and West Shed Area) and Phase IV (Parker Residence and Long Shed Area) (SEE Earthwork/Excavation Plan).

TRAFFIC CONTROL

1.0 – Description

This plan describes the work that shall consist of furnishing and applying the necessary traffic control materials, equipment, personnel and materials, including establishing the locations for traffic control materials at the former W. R. Grace and Company, Screening Plant (Operable Unit 02, OU2).

2.0 – Materials

Traffic Signs

- a. Trucks Entering
- b. Construction Zone Ahead
- c. Reduced Speed Ahead
- d. Fines Doubled in Work Zones
- e. Construction Zone Speed Limit 45 MPH
- f. End Speed Zone
- g. End Construction
- h. Flagmen Ahead
- i. Prepare to Stop
- j. Concrete K-rails

3.0 – Personnel

Laborers – Flagmen, Traffic Control

4.0 – Equipment

Hand held radios

Hand held stop and slow signs

5.0 – Preparation

Preparation shall include all the work required to make ready the areas or locations for the traffic control signs. The locations of the traffic control signs are shown on **DRWG XXXXXX**. Notification of the State of Montana, Department of Transportation, Traffic Engineering Division, Missoula, Montana shall be made prior to initiating the traffic control plan. The Montana DOT District Traffic Control Engineer is Darren Kaufman (406) 523-5800.

Notification shall be made to local law enforcement of the scheduled work activities and required traffic control. Local law enforcement shall be made aware of reduced speed limits in the construction zone.

6.0 – Installation

Installation of the traffic control signs shall be done in accordance with the details shown on **DRWG XXXX**.

7.0 – Procedures

Installation of the traffic control signs at the locations shown on **DRWG XXXXX**

The initial traffic control shall consist of the traffic control signs staged at the locations shown on **DRWG XXXX**.

The scheduled time critical asbestos removal operations at OU2 include the use of semi-tractor trailer end dump trucks to transport asbestos contaminated demolition debris and soils from OU2 to the Abandoned Vermiculite Mine (Mine). This activity will necessitate these loaded semi-tractor trailer end dump trucks to cross Highway 37 at a maximum frequency of every 6 minutes. Emptied semi-tractor trailer end dump trucks shall be returning from the Mine at a maximum frequency of every 6 minutes. These trucks shall be controlled by flagmen staged at the road crossing of Highway 37 and Rainy Creek Road that shall control the semi-tractor trailer end dump trucks by radio and hand held stop signs. Traffic control personnel shall be staged at the hill on Highway 37 east (approximately 600 feet) of the intersection and 1000 feet to the west. Traffic Control personnel shall have hand held radios having the same frequency used for the site communications. Semi-tractor trailers shall be allowed to cross Highway 37 when traffic control personnel announce that public traffic is not approaching the intersection from the east or west.

TRANSPORTATION AND DISPOSAL PLAN LIQUID HAZARDOUS WASTE MANAGEMENT PLAN

1.0 – Description

This plan describes the work that shall consist of providing the necessary Transportation and Disposal services and Liquid Hazardous Waste Management procedures required during time critical emergency removal actions at the former W. R. Grace and Company, Screening Plant (Operable Unit 02, OU2).

This plan provides the details for the required materials, equipment, and personnel, including establishing the locations for Temporary Storage, Transportation and Disposal of Hazardous Waste, Non-Hazardous Waste, Liquid Hazardous Waste, onsite Hazardous Materials, Asbestos Containing Materials, asbestos contaminated soils, and asbestos contaminated demolition debris for the project.

2.0 – Materials

- a. Shipping containers
- b. Packing materials
- c. Absorbent materials
- d. 6 mil plastic
- e. Labels
- f. Permanent ink markers
- g. Placards
- h. Manifests
- i. Bill of Lading
- j. Land Disposal Restrictions
- k. Waste Profiles
- l. Hay bales

3.0 – Personnel

Chemist
Laborers
End Dump Truck Drivers
Hazardous Waste Transporters
Water Truck Drivers

4.0 – Equipment

- a. Haz cat kit
- b. Photoionization unit
- c. LEL/O2 Meter
- d. Forklift
- e. Excavators
- f. Loaders
- g. Hazardous waste transport vehicles
- h. End dump trucks
- i. Articulating Dump Trucks

5.0 – Preparation

5.1 - EPA Identification Numbers

The Government shall obtain a site EPA Identification Number prior to initiating any transportation and disposal activities. Transportation companies shall provide their EPA Identification Number prior to initiating any transportation and disposal for this project. Disposal facilities shall provide their EPA Identification Numbers prior to initiating and transportation and disposal for this project.

5.2 - Abandoned Vermiculite Mine Disposal Site

The Mine is not recognized as a licensed disposal facility. The Federal Government has directed the MARCOR to dispose of the asbestos contaminated soils and demolition debris at the Mine and agrees to indemnify and hold harmless the Contractor from any liability whatsoever that may arise from using the Mine as a disposal facility for this project.

Rainy Creek Road shall be treated with a dust suppressant prior to initiating transportation and disposal to the Mine.

5.3 - Decontamination Facilities

Decontamination Facilities at the site shall consist of using clean corridor haul roads constructed of 5/8" crushed and screened stone prior to initiating transportation and disposal to the Mine (ref. Temporary Facilities Plan).

Decontamination Facilities at the mine shall consist of a 4,000-gallon water tank and gravity feed water hose with a gasoline powered pressure washer. The truck drivers shall wash down the exterior of their trucks prior to exiting the Mine. Decontamination water shall be allowed to percolate into the Mine site soils since the soils are presumed contaminated from asbestos contaminated vermiculite.

5.4 - Shipping Documents

A State of Montana approved Bill of Lading shall be used as transportation and disposal documentation for waste that is deposited at the Mine. The Bill of Lading shall document the site, and transporters EPA Identification Number, truck number, estimated load volume in cubic yards, drivers signature, Mine operators signature, date and time of disposal. Truck drivers shall be required to be licensed in the State of Montana, insured, hazardous waste endorsements, and trained in accordance with 29 CFR 1910.120, 1910.1101 and 40 CFR Part 763. Documentation of this training shall be submitted for review and acceptance prior to the start of work. Truck drivers shall be subject to the rules, regulations and requirements identified in the Site Health and Safety Plan and imposed by the Contractor's Standard Operating Procedures and subcontractor requirements.

Shipping documents for waste disposal at an off site facility shall comply with all Federal, State and Local requirements. Uniform Hazardous Waste Manifests, Waste Profiles, Land Disposal Restriction (LDR) forms shall be used for shipments of hazardous waste from OU2. The transportation and disposal subcontractor shall be required to fulfill all provisions of the Prime Contract and the Contractor's standard operating procedures and subcontractor requirements.

6.0 – Procedures

6.1 - Hazardous Waste

Hazardous waste shall be sorted and stored by hazard classification in the temporary hazardous waste storage area (ref. Temporary Facilities Plan). The chemist shall sort the hazardous waste so that it can be prepared for shipment in proper containers. All hazardous material, or suspected hazardous materials, and hazardous waste shall be removed from each structure, segregated by hazard classification, and prepared for transportation and disposal prior to the start up of any dismantling/demolition activity.

6.2 - Non-hazardous Waste

Salvageable inventoried property shall be removed from OU2 and stored at an offsite location. Non-salvageable inventoried property shall be discarded and treated as asbestos contaminated material. A licensed appraiser prior to determining its final disposition shall appraise personal property at OU2. The Government shall direct the Contractor as to the final disposition of appraised personnel property.

6.3 - Liquid Hazardous Waste

The Chemist shall determine the locations of liquid hazardous waste. Liquid hazardous waste shall be managed in the same manner described for "Hazardous Waste" (see above).

6.4 - Onsite Storage of Hazardous Materials

The project requires the use and storage of diesel fuels, oils, lubricants, and other petroleum products. The Contractor shall provide Material Safety Data Sheets (MSDS) for all materials stored onsite in accordance with the approved Health and Safety Plan. The temporary hazardous materials storage area will be mobile since the Remedial Action Work Plan requires dismantling/demolition, and excavation of the entire property. The Contractor shall utilize trailer mounted steel diesel storage tanks for diesel fuel and steel containers for oils, lubricants, and other petroleum products. The Contractor will have the ability to move these containers with ease as the dismantling/demolition, and soils excavation work progresses throughout the property. Daily fueling and servicing of heavy equipment shall be done using an onsite vehicle accessing the clean corridor haul roads to prevent vehicle contamination or cross contamination of clean work areas.

6.5 - Asbestos Containing Materials

In the event Regulated Asbestos Containing Materials are encountered and require transportation and disposal to an offsite facility, then the Contractor shall prepare the RACM for offsite transportation and disposal. The best value for a licensed disposal facility for RACM shall be determined using procurement policies and procedures acceptable to the Government.

6.6 - Asbestos Contaminated Soils

Asbestos contaminated soils shall be transported and disposed at the Abandoned Vermiculite Mine (Mine) using licensed, trained, insured, and lined semi-tractor trailer end dump trucks. Asbestos Contaminated Soils shall be excavated and loaded onto articulating dump trucks, stockpiled at the Greenhouse slab, Long Shed slab, and asphalt pad in the horse pasture (ref. Temporary Facilities Plan). Stockpiles shall be maintained using a CATD8 bulldozer and water trucks. Stockpiles shall be covered at the end of each shift using 6-mil plastic or treated with an approved dust suppressant chemical.

Semi-tractor trailer end dump trucks shall be allowed to access the stockpiles using a clean corridor haul road constructed of 5/8" crushed and screened stone (ref. Temporary Facilities Plan). The end dump trucks shall approach each loading area where technicians shall line the dump truck bed with 6-mil plastic. A CAT 966 (or equal) rubber tire wheel loader shall load the trucks under constant water spray. Once the end dump is loaded, the truck shall proceed back to the truck preparation facility where technicians shall wrap the plastic liner (burrito wrap) and allow the truck to extend its water tight tarp over the entire load. The Contractor shall have a prepared Bill of Lading that the driver shall sign, and a representative from the Government shall sign as the generator. The loaded end dump truck shall be allowed to exit the site over the clean corridor haul roads and in accordance with the Traffic Control Plan.

The loaded trucks shall proceed to the Mine using Rainy Creek Road. The end dump trucks shall be directed by the operators of the Mine as to where the load is to be placed. Once the end dump is empty, the truck shall proceed to the Mine decontamination facility and wash down (ref. Temporary Facilities Plan).

A representative of the Mine operations shall sign the truck driver's Bill of Lading and exit the decontamination facility.

6.7 - Asbestos Contaminated Demolition Debris

Asbestos contaminated demolition debris shall be handled in the same manner as the asbestos contaminated soils with one exception (ref. Asbestos Contaminated Soils above). The exception shall be the debris shall not be wrapped in plastic or tarped. Demolition debris consists of many sharp objects and wrapping each load prior to transportation and disposal at the Mine would result in damage to the plastic and tarp over the load. Prior to loading out the demolition debris, the debris pile shall be thoroughly soaked to wash away any remaining dust for the short trip to the Mine.

TRANSPORTATION AND DISPOSAL PLAN LIQUID HAZARDOUS WASTE MANAGEMENT PLAN

1.0 – Description

This plan describes the work that shall consist of providing the necessary Transportation and Disposal services and Liquid Hazardous Waste Management procedures required during time critical emergency removal actions at the former W. R. Grace and Company, Screening Plant (Operable Unit 02, OU2).

This plan provides the details for the required materials, equipment, and personnel, including establishing the locations for Temporary Storage, Transportation and Disposal of Hazardous Waste, Non-Hazardous Waste, Liquid Hazardous Waste, onsite Hazardous Materials, Asbestos Containing Materials, asbestos contaminated soils, and asbestos contaminated demolition debris for the project.

2.0 – Materials

- a. Shipping containers
- b. Packing materials
- c. Absorbent materials
- d. 6 mil plastic
- e. Labels
- f. Permanent ink markers
- g. Placards
- h. Manifests
- i. Bill of Lading
- j. Land Disposal Restrictions
- k. Waste Profiles
- l. Hay bales

3.0 – Personnel

Chemist

Laborers

End Dump Truck Drivers

Hazardous Waste Transporters

Water Truck Drivers

4.0 – Equipment

- a. Haz cat kit
- b. Photoionization unit
- c. LEL/O2 Meter
- d. Forklift
- e. Excavators
- f. Loaders
- g. Hazardous waste transport vehicles
- h. End dump trucks
- i. Articulating Dump Trucks

5.0 – Preparation

5.1 - EPA Identification Numbers

The Government shall obtain a site EPA Identification Number prior to initiating any transportation and disposal activities. Transportation companies shall provide their EPA Identification Number prior to initiating any transportation and disposal for this project. Disposal facilities shall provide their EPA Identification Numbers prior to initiating and transportation and disposal for this project.

5.2 - Abandoned Vermiculite Mine Disposal Site

The Mine is not recognized as a licensed disposal facility. The Federal Government has directed the MARCOR to dispose of the asbestos contaminated soils and demolition debris at the Mine and agrees to indemnify and hold harmless the Contractor from any liability whatsoever that may arise from using the Mine as a disposal facility for this project.

Rainy Creek Road shall be treated with a dust suppressant prior to initiating transportation and disposal to the Mine.

5.3 - Decontamination Facilities

Decontamination Facilities at the site shall consist of using clean corridor haul roads constructed of 5/8" crushed and screened stone prior to initiating transportation and disposal to the Mine (ref. Temporary Facilities Plan).

Decontamination Facilities at the mine shall consist of a 4,000-gallon water tank and gravity feed water hose with a gasoline powered pressure washer. The truck drivers shall wash down the exterior of their trucks prior to exiting the Mine. Decontamination water shall be allowed to percolate into the Mine site soils since the soils are presumed contaminated from asbestos contaminated vermiculite.

5.4 - Shipping Documents

A State of Montana approved Bill of Lading shall be used as transportation and disposal documentation for waste that is deposited at the Mine. The Bill of Lading shall document the site, and transporters EPA Identification Number, truck number, estimated load volume in cubic yards, drivers signature, Mine operators signature, date and time of disposal. Truck drivers shall be required to be licensed in the State of Montana, insured, hazardous waste endorsements, and trained in accordance with 29 CFR 1910.120, 1910.1101 and 40 CFR Part 763. Documentation of this training shall be submitted for review and acceptance prior to the start of work. Truck drivers shall be subject to the rules, regulations and requirements identified in the Site Health and Safety Plan and imposed by the Contractor's Standard Operating Procedures and subcontractor requirements.

Shipping documents for waste disposal at an off site facility shall comply with all Federal, State and Local requirements. Uniform Hazardous Waste Manifests, Waste Profiles, Land Disposal Restriction (LDR) forms shall be used for shipments of hazardous waste from OU2. The transportation and disposal subcontractor shall be required to fulfill all provisions of the Prime Contract and the Contractor's standard operating procedures and subcontractor requirements.

6.0 – Procedures

6.1 - Hazardous Waste

Hazardous waste shall be sorted and stored by hazard classification in the temporary hazardous waste storage area (ref. Temporary Facilities Plan). The chemist shall sort the hazardous waste so that it can be prepared for shipment in proper containers. All hazardous material, or suspected hazardous materials, and hazardous waste shall be removed from each structure, segregated by hazard classification, and prepared for transportation and disposal prior to the start up of any dismantling/demolition activity.

6.2 - Non-hazardous Waste

Salvageable inventoried property shall be removed from OU2 and stored at an offsite location. Non-salvageable inventoried property shall be discarded and treated as asbestos contaminated material. A licensed appraiser prior to determining its final disposition shall appraise personal property at OU2. The Government shall direct the Contractor as to the final disposition of appraised personnel property.

6.3 - Liquid Hazardous Waste

The Chemist shall determine the locations of liquid hazardous waste. Liquid hazardous waste shall be managed in the same manner described for "Hazardous Waste" (see above).

6.4 - Onsite Storage of Hazardous Materials

The project requires the use and storage of diesel fuels, oils, lubricants, and other petroleum products. The Contractor shall provide Material Safety Data Sheets (MSDS) for all materials stored onsite in accordance with the approved Health and Safety Plan. The temporary hazardous materials storage area will be mobile since the Remedial Action Work Plan requires dismantling/demolition, and excavation of the entire property. The Contractor shall utilize trailer mounted steel diesel storage tanks for diesel fuel and steel containers for oils, lubricants, and other petroleum products. The Contractor will have the ability to move these containers with ease as the dismantling/demolition, and soils excavation work progresses throughout the property. Daily fueling and servicing of heavy equipment shall be done using an onsite vehicle accessing the clean corridor haul roads to prevent vehicle contamination or cross contamination of clean work areas.

6.5 - Asbestos Containing Materials

In the event Regulated Asbestos Containing Materials are encountered and require transportation and disposal to an offsite facility, then the Contractor shall prepare the RACM for offsite transportation and disposal. The best value for a licensed disposal facility for RACM shall be determined using procurement policies and procedures acceptable to the Government.

6.6 - Asbestos Contaminated Soils

Asbestos contaminated soils shall be transported and disposed at the Abandoned Vermiculite Mine (Mine) using licensed, trained, insured, and lined semi-tractor trailer end dump trucks. Asbestos Contaminated Soils shall be excavated and loaded onto articulating dump trucks, stockpiled at the Greenhouse slab, Long Shed slab, and asphalt pad in the horse pasture (ref. Temporary Facilities Plan). Stockpiles shall be maintained using a CATD8 bulldozer and water trucks. Stockpiles shall be covered at the end of each shift using 6-mil plastic or treated with an approved dust suppressant chemical.

Semi-tractor trailer end dump trucks shall be allowed to access the stockpiles using a clean corridor haul road constructed of 5/8" crushed and screened stone (ref. Temporary Facilities Plan). The end dump trucks shall approach each loading area where technicians shall line the dump truck bed with 6-mil plastic. A CAT 966 (or equal) rubber tire wheel loader shall load the trucks under constant water spray. Once the end dump is loaded, the truck shall proceed back to the truck preparation facility where technicians shall wrap the plastic liner (burrito wrap) and allow the truck to extend its water tight tarp over the entire load. The Contractor shall have a prepared Bill of Lading that the driver shall sign, and a representative from the Government shall sign as the generator. The loaded end dump truck shall be allowed to exit the site over the clean corridor haul roads and in accordance with the Traffic Control Plan.

The loaded trucks shall proceed to the Mine using Rainy Creek Road. The end dump trucks shall be directed by the operators of the Mine as to where the load is to be placed. Once the end dump is empty, the truck shall proceed to the Mine decontamination facility and wash down (ref. Temporary Facilities Plan).

A representative of the Mine operations shall sign the truck driver's Bill of Lading and exit the decontamination facility.

6.7 - Asbestos Contaminated Demolition Debris

Asbestos contaminated demolition debris shall be handled in the same manner as the asbestos contaminated soils with one exception (ref. Asbestos Contaminated Soils above). The exception shall be the debris shall not be wrapped in plastic or tarped. Demolition debris consists of many sharp objects and wrapping each load prior to transportation and disposal at the Mine would result in damage to the plastic and tarp over the load. Prior to loading out the demolition debris, the debris pile shall be thoroughly soaked to wash away any remaining dust for the short trip to the Mine.

TEMPORARY FACILITIES PLAN

1.0 – Description

This plan describes the work that shall consist of furnishing the necessary temporary facilities, including all materials, equipment, and personnel required to establish the temporary facilities required for the time critical asbestos removal action at the former W. R. Grace and Company, Screening Plant (Operable Unit 02, OU2).

2.0 – Materials

- a. Crushed miscellaneous road base materials
- b. Utility hook ups
- c. Temporary chain link fence
- d. Onsite fuel storage tanks
- e. Onsite petroleum products
- f. Water pumps hook ups
- g. Hay bales
- h. Silt fence
- i. Project Sign
- j. Supplies – PPE, 6 mil plastic, etc.

3.0 – Personnel

Laborers
Equipment operators
Water truck drivers
End Dump Truck Drivers

4.0 – Equipment

Office trailers
Decon trailer
Personal computers
Facsimiles
Copier machines
Telephones
Base radio station
Hand held radios
Portable toilets
Portable storage containers
Backhoe
Dump trucks
Water trucks
Fuel pump
Water pumps
Wheel loader
Pressure washers
Hand tools

5.0 – Preparation

Preparation shall include all the work required to make ready the areas or locations for the Temporary Facilities. The locations of the temporary facilities are shown on the Temporary Facilities Plan.

6.0 – Installation

Installation of the Temporary Facilities shall be done in accordance with the details shown on the Temporary Facilities Plan.

Office trailers, decon trailer, and associated command post equipment shall be installed per manufacturer's recommendations or in accordance with the Remedial Action Work Plan and technical specifications.

A clean corridor haul route shall be established and installed using crushed miscellaneous road base materials at the location shown on the Temporary Facilities Plan. This haul route shall be used for onsite traffic that must avoid contact with potentially contaminated soils. This onsite traffic shall include, but not be limited to, offsite trucking, water trucks, personnel, and equipment service vehicles. This clean corridor haul route shall be maintained throughout the life of the project.

Equipment decontamination shall be done at established decon facilities. Equipment decontamination may take place on concrete or asphalt surfaces that are adjoined by undisturbed areas to be excavated (ref. Temporary Facilities Plan).

An equipment decontamination pad shall be constructed towards the end of the project so that equipment may be decontaminated prior to being demobilized from the site. The Equipment Decontamination Pad shall be constructed by excavating an area approximately 20' x 60' x 1'. A 3" layer of sand shall be placed and compacted inside the excavation. Then a 20-mil plastic liner shall be placed onto the compacted sand. Another 3" layer of sand shall be placed onto the plastic. The remainder of the excavation shall be filled with 5/8" screened gravel. A sump pump shall be placed into a well at the low end of the decon pad so that decontamination water may be collected. A small water tank and 5 micron filter system shall be staged to store and filter the decon water prior to being discharged as dust control water.

7.0 – Procedures

Installation of the Temporary Facilities shall be done at the locations shown on the Temporary Facilities Plan.

The office trailers shall serve as the Command Post for this project. All temporary facilities must be in place before initiating any structural dismantling, demolition, earthwork, and excavation except for the installation of the erosion control measures.

Temporary facilities shall be inspected daily by project personnel. Facilities requiring repair or replacement shall be given priority.

The Clean Corridor Haul Roads shall be washed daily using a water truck side spray nozzle and fire hose.

The temporary decon facilities shall be washed daily using a water truck side spray nozzle and fire hose. These temporary decon facilities shall be located adjacent to undisturbed areas to be excavated. Decon water at these locations shall be controlled using the approved erosion control measures. When it is no longer practical to decon equipment near areas to be excavated, the decon pad described in section 6.0 shall be installed.

Onsite storage of fuel shall be by trailer mounted fuel storage tanks. This will allow the removal and replacement of this critical item when excavation of the temporary storage area is required. This will also allow the fuel to be transported to the heavy equipment fueling areas as opposed to the heavy equipment tracking to the onsite fuel storage area.

Onsite storage of hazardous waste or waste that must be disposed at a location other than the Abandoned Vermiculite Mine (Mine) shall be transported offsite as soon as possible. Waste being disposed in this manner shall be given priority.

Where practical, the approved Erosion Control measures shall be in place before the placement of temporary facilities such as the clean corridor haul roads.

Temporary electrical power shall be provided by Flathead Electric. A temporary power pole shall be installed near the office trailers. Initial temporary power shall be from the panel located at the greenhouses.

Water shall be supplied to the office trailers from Rainy Creek through an existing line that has been flushed by a State of Montana licensed plumber.

Sanitary sewage generated from the office trailers shall be collected in onsite storage tanks and pumped weekly by a septic system pumping service. Portable toilets provide additional sanitary services. These portable toilets shall be located near the decon trailer so that crewmembers may access the facilities after going through the decon trailer.

A decon trailer with a dirty room, shower room (with 4 showers), and clean room (with lockers) shall be located near the office trailers. Water from the decon trailer shall be collected and filtered before being transported by the septic pumping service.

EARTHWORK/EXCAVATION PLAN

1.0 – Description

This plan describes the procedures to be employed by MARCOR during earthwork and excavation of asbestos contaminated soils at the former W. R. Grace and Company, Screening Plant (Operable Unit 02, OU2) in Libby, Montana.

2.0 – Materials

The approved erosion control plan shall be in place prior to initiating the earthwork/excavation plan.

3.0 – Personnel

Equipment operators
Technicians
Truck Drivers

4.0 – Equipment

Excavators with progressive linkage thumbs
Bulldozers
Backhoes
Wheel Loaders
Water Trucks
Pressure Washers
End Dump Trucks
Articulating Dump Trucks
Bottom Dump Trucks

5.0 – Procedures for Earthwork/Excavation

The site shall be divided into a grid pattern. Surface soil samples shall be collected from each grid and analyzed for asbestos using methodology acceptable to the Government. CDM Federal shall perform the Soil Sampling Plan. The results of the Soil Sampling Plan shall be plotted onto the Excavation Plan. The Contractor shall receive a copy of the Excavation Plan that shall illustrate the areas where soil is to be removed.

Earthwork/Excavation Initial Inspection

The Project Superintendent and a representative from the Government shall inspect the structure to determine the following:

- a. Federal, State and local authorities have been notified in writing of the nature and schedule of the work
- b. State of Montana, U-Dig have been contacted 48 hours in advance of work and assigned a site specific number (800)551-8344
- c. Erosion Control measures are in place and in good condition
- d. Utilities have been properly disconnected or isolated from the area to be excavated
- e. Adequate water supply is available for dust control
- f. The excavation work area has been thoroughly soaked with water prior to start of work
- g. The Government has granted permission to proceed with excavation in the specific grid
- h. The crew has been briefed as to the steps required to conduct a safe excavation of the grid
- i. The water trucks are properly staged to provide adequate water spray over the excavation area to control dust

- j. The grid to be excavated has been secured and no unauthorized persons or equipment shall be allowed inside during the excavation process
- k. Hay bales are properly staged at the down gradient side of the grid to prevent rain water from transporting potentially contaminated material off site after each shift
- l. Equipment and personnel are staged outside of the swing area of the excavators
- m. Equipment and personnel are staged outside of the loading zone for the articulating dump trucks
- n. The soil stock pile area has been prepared to receive excavated soils using hay bales to construct a berm around the perimeter of the area
- o. Dust control measures are available at the soil stock pile area
- p. Stock Pile management equipment and personnel are prepared to receive excavated materials
- q. Trees to be removed shall be clearly marked with fluorescent orange flagging prior to the start of work in any grid where trees are located
- r. Trees to be protected in place shall have excavation done by rubber tire backhoe or hand around surface roots to prevent damage to trees to remain in place

The earthwork and excavation process may begin upon completion of the Initial Inspection by the Project Superintendent and approval from the Government. Proper documentation of the Initial Inspection shall be provided in the project files.

Earthwork/Excavation Work

The results of the Soil Sampling Plan plotted on the Excavation Plan shall provide guidance as to the grids to be removed. The readiness of the operations at the soil stockpile management areas shall govern the sequence of the grids to be removed. The following shall govern the earthwork/excavation process at all times unless the Project Manager or the Government changes it in writing:

- a. All personnel must be briefed by the Site Superintendent or his designee of the days work and these procedures before being allowed to begin their work shift
- b. Each excavation work crew shall consist of one excavator operator, one water truck driver, one or two articulating dump truck driver(s), and one or two laborers
- c. Excavation of soils shall be performed using excavators cutting soils to a depth of 18 inches.
- d. Excavator buckets shall have cutting edges, no teeth (steel plates shall be welded to the teeth)
- e. Personnel and equipment shall be staged on undisturbed soil and will not enter excavated areas without obtaining permission from the Site Superintendent or clearance from the Health and Safety Officer
- f. Personnel and equipment shall be staged upwind of the work area whenever possible to reduce the risk of exposure to airborne asbestos fibers
- g. Excavators shall pull the soils towards the machine and create a small spoils pile from which it will load each dump truck
- h. Constant water spray using the fire hoses on the water trucks shall be applied to the cutting edge of the excavator bucket at times while the cutting edge of the excavator bucket is in motion and in contact with the soil
- i. The water truck driver and excavator operator shall be in radio contact with each other at all times
- j. The water truck driver and excavator operator shall maintain a clear field of vision between themselves at all times except when the water truck needs to obtain a load of water
- k. Articulating dump truck operators shall not approach the excavator and water truck driver until they are given permission to do so by radio contact from the excavator operator
- l. Haul routes for the articulating dump trucks shall be over undisturbed areas or over a clean corridor (ref. Temporary Facilities Plan)
- m. Soil stockpile areas are prepared to receive soils using an area on asphalt or concrete
- n. If visible dust emissions occur, then the operation shall stop while the water truck operator sprays the dust from an upwind position

Earthwork/Excavation Sequence

The site shall be divided into a grid and each grid shall be approximately 100 feet square. There are approximately 73, 100 foot square grids on within the 16.7 acre site (rationale: 16.7 acres x 43,560 sq.ft. per acre equals 727,452 sq. ft. divided by 10,000 sq. ft. equals 72.7, 100 foot square grids or 73 grids). In an effort to protect clean areas from becoming cross contaminated from rain water run off flowing from potentially contaminated areas to clean areas, up gradient grids shall be done before progressing onto down gradient grids.

The work associated with the Earthwork/Excavation Plan shall be divided into 7 Phases. These Phases shall be approximately 200 feet wide running from Highway 37 to the Kootenai River. A description of each area is as follows (SEE EXCAVATION PLAN):

Phase I – Open Pasture Area. There are approximately 8 grids in this Phase. Phase I is located on the northeastern corner of the property and on a line 200 feet south along Highway 37, then on a 90° angle 400 feet west to the bank of the Kootenai River. This area encompasses the open pasture and is bounded on the south by the greenhouses, west by the Kootenai River, the north by property boundary, and the east by the right-of-way of Highway 37.

Phase I totals approximately 80,000 square feet, or 1.83 acres. There are approximately 4,428 cubic yards of potentially asbestos contaminated soils in Phase I. At 750 cubic yards per day, Phase I should be completed in 6 days.

Phase II – Greenhouse Area. There are approximately 10 grids in this Phase. Phase II is located inside a line running south along Hwy 37 200 feet from the end point of Phase I, then on a 90° angle 500 feet west to the bank of the Kootenai River. This work phase encompasses the greenhouses and is bounded on the south by the pump house area, west by the Kootenai River, the north by the open pasture, and the east by the right-of-way of Highway 37.

Phase II totals approximately 100,000 square feet, or 2.29 acres. There are approximately 5,542 cubic yards of potentially asbestos contaminated soils in Phase II. At 750 cubic yards per day, Phase II should be completed in 8 days.

Phase III – Pump House and West Shed Area. There are approximately 12 grids in this Phase. Phase III is located inside a line running south along Hwy 37 200 feet from the end point of Phase II, then on a 90° angle 500 feet west to the bank of the Kootenai River. This work phase encompasses the pump house and West Shed and is bounded on the south by the Parker residence area and Long Shed, west by the Kootenai River, the north by the greenhouse area, and the east by the right-of-way of Highway 37 and the main gate.

Phase III totals approximately 120,000 square feet, or 2.75 acres. There are approximately 6,665 cubic yards of potentially asbestos contaminated soils in Phase III. At 750 cubic yards per day, Phase III should be completed in 9 days.

Phase IV – Parker Residence and Long Shed Area. There are approximately 17 grids in this Phase. Phase IV is located inside a line running south along Hwy 37 to Rainy Creek, then west to the bank of the Kootenai River. This work phase encompasses the Parker residence and Long Shed and is bounded on the south by Rainy Creek, west by the Kootenai River, the north by the pump house and West Shed area, and the east by the right-of-way of Highway 37 and the main gate.

Phase IV totals approximately 170,000 square feet, or 3.90 acres. There are approximately 9,436 cubic yards of potentially asbestos contaminated soils in Phase IV. At 750 cubic yards per day, Phase IV should be completed in 13 days.

Phase V – Grave and Cross Area. There are approximately 15 grids in this Phase. Phase V is located inside a line running due south along the Wise Property, then due west to the bank of the Kootenai River. This work phase encompasses the grave and cross and is bounded on the south by pump house property owned by Mark Owens, west by the Kootenai River, the north by the horse pasture, and the east by the Wise Property.

Phase V totals approximately 150,000 square feet, or 3.44 acres. There are approximately 8,331 cubic yards of potentially asbestos contaminated soils in Phase V. At 750 cubic yards per day, Phase V should be completed in 12 days.

Phase VI – Horse Pasture Area. There are approximately 10 grids in this Phase. Phase VI is located inside a line running 200 feet south along the Hwy 37 from Rainy Creek, then west 600 feet to the bank of the Kootenai River. This work phase encompasses the horse pasture and is bounded on the south by the Grave and Cross Area, west by the Kootenai River, the north by Rainy Creek, and the east by the Wise Property.

Phase VI totals approximately 100,000 square feet, or 2.29 acres. There are approximately 5,554 cubic yards of potentially asbestos contaminated soils in Phase VI. At 750 cubic yards per day, Phase VI should be completed in 8 days.

Phase VII – Clean Corridor and Haul Road Area. There are no grids in this Phase or work. Phase VII consists of the clean corridor and haul roads used during the course of work. This work phase shall be performed last. Starting with the farthest point on the clean corridor haul roads and working towards the front of the property (ref. Temporary Facilities Plan). The Clean Corridor and Haul Roads are approximately 2,500 feet in length and average 20 feet wide.

If 6 inches of clean imported crushed stone are placed onto this road right-of-way to provide a clean corridor for onsite and offsite trucking and an 18" cut into undisturbed soil is required, then Phase VII totals approximately 3,704 cubic yards. At 750 cubic yards per day, Phase VII should be completed in 5 days.

The grids that are located near the north and east boundary of each Phase shall be excavated first. The excavation process shall begin inside the up gradient grids. Excavators shall stage facing Highway 37. The excavators shall be working in the manner described above and move in a southerly direction, then back to the northern boundary of the grid or to the next undisturbed area within the grid until the entire grid is removed. Then the excavator shall move back to the edge of the grid nearest the northern boundary of the grid or to the undisturbed area of the grid and again move in a southerly direction. It is anticipated that each grid shall be approximately 100 feet in length. Upon completion of the first grid, the excavation shall begin the adjoining grid to the south of the preceding grid running parallel to Highway 37. Removing the soil in this manner and sequence shall assist in the prevention of cross contaminating grids from rain water as the grids are cleared from up gradient to down gradient. Excavating the soil in this manner shall also make ready a large onsite storage area for the importing of backfill materials. This work shall be considered clean work provided air monitoring and soil sampling results indicate a clean area. Access to the property for the clean backfill work shall be through the gate currently located at the northeast corner of the Greenhouse Area (ref. Temporary Facilities Plan).

The backfill process may begin when an entire Phase is deemed clean from confirmatory sample results. Imported backfill shall be delivered in bottom dump trucks. A CAT D8 bulldozer, water trucks and CAT 140G Motor Grader shall be used to spread and compact the imported materials. Compaction should not be excessive so that seeds may germinate and plant growth may easily take root.

DUST CONTROL PLAN

1.0 – Description

This plan describes the work that shall consist of furnishing and applying the necessary dust control materials, equipment, and personnel, including establishing the locations for dust control materials at the former W. R. Grace and Company, Screening Plant (Operable Unit 02, OU2) in accordance with Drawing C3.

2.0 – Materials

- a. Water from Rainy Creek
- b. Water from the Kootenai River
- c. 1 ½" fire hose
- d. ¾" garden hose
- e. Fire hose nozzles
- f. 4" PVC pipe
- g. 4" rubber boot
- h. Magnesium chloride, Lignin or Soil Sement (® of Midwest Industrial Supply)

3.0 – Personnel

Laborers
Water Truck Drivers

4.0 – Equipment

6" water pump
6" Water Truck Loading Tower with Rubber Boot
Water trucks
Modified water trucks for application of liquid chemical dust suppressant
CAT 140G Motor Grader with rippers

5.0 – Preparation

Preparation shall include all the work required to make ready the areas or locations for the dust control measures. The locations of the dust control measures are:

- a. At all heavy equipment and other work activities involving structural dismantling/demolition and earthwork
- b. Rainy Creek Road from Highway 37 to the Abandoned Vermiculite Mine (Mine)
- c. At locations where the generation of dust emissions is likely or suspected

Preparation of Rainy Creek Road using applied dust suppressants may include the use of a CAT140G Motor Grader with rippers to scarify the first 6" of the road base. The modified water trucks would apply the dust suppressant. Then the CAT140G Motor Grader would blend the road base materials that contain the dust suppressant and level. The treated area would be allowed to cure for 24 hours. This procedure would apply to using a dust control measure other than magnesium chloride.

6.0 – Application

- a. Dust control measures using water trucks and hoses with a spray directly at the point where equipment contacts any structure or soil
- b. Preparation and placement of magnesium chloride, Lignin or Soil Sement ® onto Rainy Creek Road

- c. Preparation and placement of magnesium chloride, Lignin or Soil Sement ® onto stock piles
- d. Preparation and placement of magnesium chloride, Lignin or Soil Sement ® onto topsoil to protect against soil erosion from wind or rain

7.0 – Procedures

Air monitoring results or visual inspections may dictate modification to this dust control plan or require the use of additional dust control measures.

At the beginning of each work shift and prior to the start up of any dismantling/demolition or earthwork, water shall be applied to all surfaces within the work areas. Water shall not be allowed to pond except during the dismantling/demolition phase of work.

Onsite water trucks shall be loaded by the 4" water pump and 4" water tower located at the Kootenai River. Water trucks used on clean areas, or on topsoil shall be required to obtain water using a clean corridor to the location of the water outlet from Rainy Creek Road shown on the Temporary Facilities Plan.

Dust control provided using hand held 1 ½" fire hoses shall be connected to the existing water line from Rainy Creek Road. Additional 1 ½" fire hose shall be connected to the 4" water pump and water supplied by the Kootenai River.

At the beginning of each work shift, the water trucks shall apply water to the clean corridor haul roads before onsite traffic is allowed to use the onsite haul roads.

There shall be at least two water trucks onsite and in operation at all times. One water truck shall stay on the clean corridor haul roads and avoid contacting any potentially contaminated soils. The second water truck shall be assigned work adjacent to operating heavy equipment so as to provide dust control whenever and wherever heavy equipment is operating. Additional water trucks may be necessary to allow a smooth and uninterrupted operation at all work locations.

EQUIPMENT DECONTAMINATION PLAN

1.0 – Description

This plan describes the work that shall consist of furnishing the necessary equipment decontamination facilities and procedures, including all materials, equipment, and personnel required to install the equipment decontamination facilities at the former W. R. Grace and Company, Screening Plant (Operable Unit 02, OU2).

2.0 – Materials

- a. 5/8" screened crushed stone
- b. sand
- c. 20 mil plastic
- d. hay bales
- e. Existing concrete and asphalt surfaces

3.0 – Personnel

Laborers
Equipment operators
Water truck drivers
End Dump Truck Drivers

4.0 – Equipment

Water trucks
Sump pumps
Pressure washers
Hand tools
Water hoses

5.0 – Preparation

Preparation shall include all the work required to make ready the areas or locations for the Equipment Decontamination Facilities. The locations of the equipment decontamination facilities are shown on the Temporary Facilities Plan.

6.0 – Installation

Installation of the Temporary Facilities shall be done in accordance with the details shown on the Temporary Facilities Plan.

7.0 – Procedures

Equipment used to dismantle, demolish, excavate or otherwise come into contact with potentially contaminated soil or debris must be decontaminated before leaving the site or coming into contact with clean areas including the clean corridor haul roads.

Decontamination procedures shall include washing with a pressure washer or water hose all surfaces of equipment that come into contact with potentially contaminated soil or debris.

Visual inspection of equipment shall determine the completeness of the decontamination procedure employed.

Pressurized or compressed air shall not be used to decontaminate equipment.

Temporary decontamination facilities shall be allowed on existing concrete or asphalt surfaces that are adjacent to areas that containing potentially contaminated soil. These temporary decontamination facilities are shown on the Temporary Facilities Plan. This will allow access to contaminated soil stockpiles, contaminated debris stockpiles, and areas throughout the site by way of the clean corridor haul roads and these temporary decontamination facilities. This will provide for a more efficient and rapid decontamination of equipment.

A fixed decontamination facility shall be installed near the entrance of the site adjacent to the "Guest House" trailer. This facility shall be constructed as described in the Temporary Facilities Plan. This facility shall be used only by equipment departing the site. It shall not be necessary to install this fixed decontamination facility until Phase IV of the Earthwork/Excavation Plan has been completed.

A decontamination facility shall be installed at the Abandoned Vermiculite Mine (Mine). This facility shall be constructed as described in the Temporary Facilities Plan. It shall consist of a water storage tank; a gravity feed water line to a gasoline powered pressure washer. The truck drivers shall operate this facility as the trucks exit the Mine disposal site.

EROSION CONTROL

1.0 – Description

This plan describes the work that shall consist of furnishing and applying the necessary erosion control materials, including preparing areas to receive erosion control materials at the former W. R. Grace and Company, Screening Plant (Operable Unit 02, OU2).

2.0 – Materials

Materials shall comply with the Remedial Action Work Plan developed by John A. Volpe Transportation Systems Center and Technical Specifications, Section 02270, Sedimentation and Erosion Control.

The required materials are as follows:

Prefabricated commercial silt fence
Hay bales

3.0 – Personnel

Laborers
Equipment Operators
Water truck drivers

4.0 – Equipment

Backhoe
Water trucks

5.0 – Preparation

Preparation shall include all the work required to make ready the areas or locations for the erosion control structures. The locations of the erosion control structures are shown on **DRWG XXXXXX**.

6.0 – Installation

Installation of the silt fence shall be done in accordance with the details shown on **DRWG XXXX**.

Installation of hay bales shall be done in accordance with the details shown on **DRWG XXXX**

Punched Straw

The spreading of hay bales onto topsoil followed by tracking over the hay thereby punching the straw into the topsoil with the tracks. This provides a barrier to topsoil from wind, rain, and runoff that will support the hydroseeding phase of work.

7.0 – Procedures

Initial Inspection

The Project Superintendent shall inspect the site with the Project Engineer (Government Representative) to determine the following:

- a. Existing areas onsite where scouring has occurred
- b. Existing areas onsite where sheet flow will likely occur during heavy rainfall
- c. Existing locations of storm water management devices such as culverts, storm drains, pounds, and diversions

- d. Existing locations of rock structures such as rock check dams, or riprap protected slopes
- e. Review of the Drawings to determine the topography of the site and the location of the erosion control structures
- f. Inspect the materials imported to the site for erosion control
- g. Identify trees near property lines, the Kootenai River, and Rainy Creek that are to be protected in place and remain on the property
- h. Identify and mark trees with fluorescent orange flagging that shall be removed prior to installation of the erosion control structures

Upon completion of the Initial Inspection for the Erosion Control Plan, the Contractor and the Government shall agree on the strategic locations of the erosion control devices.

Preliminary Inspection

Inspection of the erosion control structures before and during the Dismantling, Demolition and Earthwork phases of work. Preliminary Inspections shall be done at least once per week or after a rainstorm and documented by the Contractor.

The Project Superintendent shall inspect the erosion control structures with the Project Engineer (Government Representative) to determine the following:

- a. The condition of the existing erosion control structures
- b. Determine if erosion control structures are in need of repair or replacement
- c. Determine if site conditions warrant installing additional erosion control structures
- d. The condition of property, the Kootenai River and Rainy Creek to determine any visible change caused by or surface water run off from the Project Site

TEMPORARY FACILITIES PLAN

1.0 - Description

This plan describes the work that shall consist of furnishing the necessary temporary facilities, including all materials, equipment, and personnel required to establish the temporary facilities required for the time critical asbestos removal action at the former W. R. Grace and Company, Screening Plant (Operable Unit 02, OU2).

2.0 - Materials

- a. Crushed miscellaneous road base materials
- b. Utility hook ups
- c. Temporary chain link fence
- d. Onsite fuel storage tanks
- e. Onsite petroleum products
- f. Water pumps hook ups
- g. Hay bales
- h. Silt fence
- i. Project Sign
- j. Supplies - PPE, 6 mil plastic, etc.

3.0 - Personnel

Laborers
Equipment operators
Water truck drivers
End Dump Truck Drivers

4.0 - Equipment

Office trailers
Decon trailer
Personal computers
Facsimiles
Copier machines
Telephones
Base radio station
Hand held radios
Portable toilets
Portable storage containers
Backhoe
Dump trucks
Water trucks
Fuel pump
Water pumps
Wheel loader
Pressure washers
Hand tools

5.0 - Preparation

Preparation shall include all the work required to make ready the areas or locations for the Temporary Facilities. The locations of the temporary facilities are shown on the Temporary Facilities Plan.

6.0 - Installation

Installation of the Temporary Facilities shall be done in accordance with the details shown on the Temporary Facilities Plan.

Office trailers, decon trailer, and associated command post equipment shall be installed per manufacturer's recommendations or in accordance with the Remedial Action Work Plan and technical specifications.

A clean corridor haul route shall be established and installed using crushed miscellaneous road base materials at the location shown on the Temporary Facilities Plan. This haul route shall be used for onsite traffic that must avoid contact with potentially contaminated soils. This onsite traffic shall include, but not be limited to, offsite trucking, water trucks, personnel, and equipment service vehicles. This clean corridor haul route shall be maintained throughout the life of the project.

Equipment decontamination shall be done at established decon facilities. Equipment decontamination may take place on concrete or asphalt surfaces that are adjoined by undisturbed areas to be excavated (ref. Temporary Facilities Plan).

An equipment decontamination pad shall be constructed towards the end of the project so that equipment may be decontaminated prior to being demobilized from the site. The Equipment Decontamination Pad shall be constructed by excavating an area approximately 20' x 60' x 1'. A 3" layer of sand shall be placed and compacted inside the excavation. Then a 20-mil plastic liner shall be placed onto the compacted sand. Another 3" layer of sand shall be placed onto the plastic. The remainder of the excavation shall be filled with 5/8" screened gravel. A sump pump shall be placed into a well at the low end of the decon pad so that decontamination water may be collected. A small water tank and 5 micron filter system shall be staged to store and filter the decon water prior to being discharged as dust control water.

7.0 - Procedures

Installation of the Temporary Facilities shall be done at the locations shown on the Temporary Facilities Plan.

The office trailers shall serve as the Command Post for this project. All temporary facilities must be in place before initiating any structural dismantling, demolition, earthwork, and excavation except for the installation of the erosion control measures.

Temporary facilities shall be inspected daily by project personnel. Facilities requiring repair or replacement shall be given priority.

The Clean Corridor Haul Roads shall be washed daily using a water truck side spray nozzle and fire hose.

The temporary decon facilities shall be washed daily using a water truck side spray nozzle and fire hose. These temporary decon facilities shall be located adjacent to undisturbed areas to be excavated. Decon water at these locations shall be controlled using the approved erosion control measures. When it is no longer practical to decon equipment near areas to be excavated, the decon pad described in section 6.0 shall be installed.

Onsite storage of fuel shall be by trailer mounted fuel storage tanks. This will allow the removal and replacement of this critical item when excavation of the temporary storage area is required. This will also allow the fuel to be transported to the heavy equipment fueling areas as opposed to the heavy equipment tracking to the onsite fuel storage area.

Onsite storage of hazardous waste or waste that must be disposed at a location other than the Abandoned Vermiculite Mine (Mine) shall be transported offsite as soon as possible. Waste being disposed in this manner shall be given priority.

Where practical, the approved Erosion Control measures shall be in place before the placement of temporary facilities such as the clean corridor haul roads.

Temporary electrical power shall be provided by Flathead Electric. A temporary power pole shall be installed near the office trailers. Initial temporary power shall be from the panel located at the greenhouses.

Water shall be supplied to the office trailers from Rainy Creek through an existing line that has been flushed by a State of Montana licensed plumber.

Sanitary sewage generated from the office trailers shall be collected in onsite storage tanks and pumped weekly by a septic system pumping service. Portable toilets provide additional sanitary services. These portable toilets shall be located near the decon trailer so that crewmembers may access the facilities after going through the decon trailer.

A decon trailer with a dirty room, shower room (with 4 showers), and clean room (with lockers) shall be located near the office trailers. Water from the decon trailer shall be collected and filtered before being transported by the septic pumping service.